NOTES OF TABLES ONE THROUGH 18

(1) The following items apply to MIL-DTL-24441 coatings:

a. MIL-DTL-24441 polyamide epoxy paints do not require thinning prior to application. If desired, the low temperature application properties can be improved by the addition of 10 percent by volume of one-to-one mixture of butyl alcohol and high flash naphtha or paint thinner TT-P-291. When sprayed without thinning at the recommended thickness, the paints have no tendency to sag. Apply a thinned mist coat of one to 2 mils WFT over existing paint.

b. When MIL-DTL-24441 polyamide epoxy paints are used at a work site having temperatures below 50 degrees Fahrenheit, it is essential that the stand-in period be accomplished in a warm area (70 degrees Fahrenheit) to ensure that the coating will cure.

c. Exterior side shell and underwater body painting at surface temperatures between 25 degrees Fahrenheit and 35 degrees Fahrenheit is not recommended, but can be approved by the SUPERVISOR provided the following conditions are met:

(1) Ambient temperature must be a minimum of 5 degrees Fahrenheit above the dew point.

(2) Hull surfaces must be absolutely dry and free of any signs of frost and ice.

(3) Drying time will be increased by four hours for a total of eight hours drying time per coat.

(4) No painting is allowed below surface temperature of 25 degrees Fahrenheit.

(5) Paint shall be stored at 70 degrees Fahrenheit for 24 hours before use.

d. Painting shall not be accomplished unless surface is dry and surface temperature is at least 5 degrees Fahrenheit above the dew point.

e. Approximate temperature of paint components in storage should be estimated in order to judge the amount of stand-in time to allow and the pot life that might be expected. The work site application temperature will greatly affect the time required for the paint to cure, and must be considered in estimating batch size, stand-in time, and cure time.

f. Paints should be sprayed using standard spray guns with applicable spray-pot pressures. The spray guns should be equipped with a middle-size (D) needle, nipple, and nozzle set-up. Both conventional and airless equipment are suitable for use with these paints.

g. Catalyzed paints should not be allowed to stand in the spray equipment for extended periods, especially in the sun (increasing temperature cures the paint more rapidly). The pot life of the paint mixture (Components A and B) is six hours at 73 degrees Fahrenheit.

h. Epoxy primers applied in the vicinity of abrasive blasting must be sheltered from airborne contaminants. Abrasive particles trapped in wet paint films are a source of premature blistering and film failure.

(2) Boottop - The boottopping is defined as the black area from minimum load waterline at which the ship is expected to operate to 12 inches above the maximum load waterline. The black paint is an anti-fouling paint conforming to MIL-PRF-24647 for a 5 to 10-year service life, or MIL-P-15931 for 2-year service life. Haze gray shall be carried to the black anti-fouling paint which marks the upper boottop paint.

(3) Ameron Amercoat 235 can be used for cold weather application below 40 degrees Fahrenheit. Apply at 5 mils DFT (minimum) per coat.

(4) Use International FCA 321 in lieu of FPA 327, or KHA414 in lieu of KHA062, for cold weather application below 50 degrees Fahrenheit.

(5) Use Hempadur 4514U in lieu of 4515 for cold weather applications below 50 degrees Fahrenheit.

(6) A minimum of 24 hours drying time shall be allowed after last coat prior to undocking.

(7) To ensure a continuous primer base, areas adjacent to those being coated with proprietary primer and non-skid listed on QPL's for MIL-PRF-24667 shall be coated with the same primer and compatible topcoat.

(8) Intentionally Left Blank

(9) DOD-E-24607, chlorinated alkyd, may also be used. MIL-PRF-24596, Type I, Grade C, Classes 1 and 2, or DOD-E-24607 must be used if surface and ambient temperature are less than 50 degrees Fahrenheit.

(10) For MIL-PRF-23236, Types I, III, or IV shall be used in fuel/saltwater ballast service. Qualified paint systems additionally designated Class One may be used with the qualified shop primer - this is generally a new construction issue. Qualified paint systems designated Class 2 are only for saltwater ballast tanks - no exposure to fuels or other hydrocarbons is permitted.

NOTES OF TABLES ONE THROUGH 18
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(11) Coating to be applied in accordance with data sheet. The maximum coating thickness will be the minimum plus 150 percent of minimum, i.e., for 8 mils this will be 8 plus 12 (for maximum allowable of 20 mils).

(12) These systems may also be invoked for preservation of decks in spaces that are prone to wear and do not receive deck covering.

(13) Anchors below lower boottopping limit shall be painted in accordance with normal underwater hull anti-corrosion/anti-fouling system.

(14) For MCM, and MHC ships, use black walnut shells conforming to A-A-1722, Type II, or garnet MIL-A-21380 or garnet MIL-A-22262, for abrasive blast media.

(15) Anchor chain and detachable links shall be marked and color coated in accordance with NSTM Chapter 581 unless otherwise directed by the Work Item.

(16) Apply one mist coat (1-2 mils) of Ameron PSX 700 after blast and prior to remaining coats where invoking Work Item requires anchor chain inspections prior to preservation.

(17) Colors shown in Tables 631-8-13 and 631-8-14 of 2.b, shall be specified by TYCOM or ship's Commanding Officer in accordance with Chapter 631-8.23.4.

(18) Restore each compartment marking in accordance with 2.h and 2.i.

(19) MIL-PRF-24667 non-skid systems shall be applied as complete systems (primer, intermediate coat when MIL-PRF-24667, Type III, coatings are invoked, non-skid, and color topping) from the same manufacturer except for the color topping. When a manufacturer does not have approved color topping, use another compatible manufacturer color topping. MIL-PRF-24667, Type I, when required, shall be specified in the invoking Work Item. Boundaries of areas receiving non-skid not specified by specific ship's drawings shall be in accordance with 2.c.

(20) Prior to accomplishing painting of wooden underwater hulls, allow the hull to dry to a moisture content of 15 percent. Readings shall be taken with an electronic moisture meter, Sovereigh Moisture Master or equal. Cover grounding plates and zincs prior to painting.

(21) Blasted surface metal must be degreased following walnut shell blasting. Even traces of residual oil will degrade coating adhesion. Optimum method is to wipe down the blasted surface with a 1:1 solvent mixture by volume of methyl ethyl ketone and mineral spirits. Appropriate safety precautions for working with flammable solvents must be enforced. Alternate procedure is a vigorous soap and water wash followed by pressurized fresh water rinse. Do not use a detergent and fresh water washdown when using aluminum oxide as an abrasive blast medium.

(22) Blasted surface must be cleaned to near white surface finish, NACE 2/SSPC-SP-10, or NACE 5/SSPC-SP-12 condition WJ-2L.
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(23) For non-edge retentive coatings, radiusing of edges is recommended to ensure maximum service life. If edges are not radiused, the service life could be substantially reduced.

(24) Deburring and grinding of weld spatter is recommended to ensure maximum service life. If weld spatter is not removed, the service life of the coating could be substantially reduced.

(25) Power impact tool cleaning using power-driven needle guns, chipping or scaling hammers, rotary scalers, single or multiple-piston scalers, or other similar impact cleaning tools shall not be utilized in the cleaning methods.

(26) For Tables 4 through 6, maintain the relative humidity in the tank or void space at a maximum of 50 percent from the start of abrasive blasting to cure of the topcoat.

(27) Finish coats for boats and craft shall be as specified in Paragraph 631-9.3.4 through 631-9.3.5 of 2.b unless otherwise specified in the invoking Work Item.

(28) Thermal insulation shall be soap and water cleaned and hand sanded.

(29) Three coats of MIL-DTL-24441, Type III, at 3-4 mils per coat can be substituted for 2 coats of MIL-DTL-24441, Type IV, at 4-6 mils per coat, for total system DFT of 8-12 mils.

(30) Grit blasting to near white metal is the preferred method of surface preparation. Only where grit blasting is not possible should power tool cleaning be used. Power tool cleaning should not be used for well deck areas frequently exposed to LCAC exhaust.

(31) A low pressure (3,000 to 5,000 psi) fresh water washdown of the well deck area shall be performed before either grit blasting or power tool cleaning to remove dirt, oil, grease, salts, and loosely adherent coatings.

(32) Upon completion of surface preparation, Ph measurements must be taken. The Ph must be in the range of 6.5 to 7.5. If it is not, the surface must be washed with fresh water until the required Ph is obtained.

(33) Runs, sags, and drips may appear in the coating due to its solvent-free nature and application properties. In the normal application of this product, the appearance of runs, sags, and drips is only superficial and is not detrimental to the coating system. In these cases, no action

shall be taken. In cases where the conditions are determined to be detrimental (coating in excess of 50 mils DFT) to the effectiveness of the coating system, immediate action shall be taken. If the wet run, sag, or drip occurs on a dry surface, brush out the run, sag, or drip and reapply the prime coat directly over the brushed out area. If the run, sag, or drip has dried, then the affected area shall be scraped or mechanically removed and the prime coat shall be reapplied.

(34) These systems may also be invoked for preservation of well deck bulkheads and decks.

(35) Fill bearing void with Termalene 2 or equal in accordance with CID A-A-50433 after each bearing void installation. Bearing void painting is to be performed only when the shaft is removed.

(36) Install vermiculite based anti-sweat treatment in accordance with Paragraph 631-7.8.3 and 631-7.8.4 of 2.b.

(37) Total DFT specified in Table 4 for potable water tanks shall not be exceeded except in isolated areas adjacent to shapes and stiffeners. In no case shall the maximum DFT be exceeded by two mils. The isolated areas shall be less than two percent of the total area.

a. For touch-up or overcoating intact aged paint in good condition, the same requirements for each coat apply, and the total film thickness maximum requirement may be corrected to allow for thickness of underlying aged paint. Requirement is to avoid excess thickness in individual coats. High DFT resulting from the application of extra coats of paint is not considered to be a problem below 35 mils total DFT.

(38) Formula 124, DOD-E-24607 tinted with DOD-C-22325 may be used when none of the approved colors are available. However, this should be a last resort.

(39) Apply heat-resistant paint (TT-P-28) to surfaces, whether insulated or not, where operating temperature is over 400 degrees Fahrenheit. Heat-resisting paint should also be applied to normally uninsulated hot metal surfaces such as boiler drum gages and pressure gage piping. Heat resisting paint is highly flammable during application and should not be applied where surface operating temperatures exceed 85 degrees Fahrenheit. Proper application is two thin coats on well-prepared, dry metal surfaces.

(40) Avoid excessive power wire brushing that results in a polished surface.

(41) Apply three coats of a vapor barrier coating compound, MIL-PRF-19565, in contrasting colors (white-orange-white), to insulation within laundries, sculleries, galleys, drying rooms, and to insulation on the warm side of refrigerated stores spaces.

(42) High temperature areas such as BLISS caps, air eductors, and exhaust stacks are addressed under "exterior exhaust piping" in Table 14.

(43) In lieu of white, use Light Gray, Color No. 26373 (Low Solar Absorption only). In lieu of black, use Ocean Gray, Color No. 26173 (Low Solar Absorption only).

(44) The prime coat of Euronavy ES301K must be of an approved primer color in accordance with 2.d.

(45) PCMS tile on the bow flares shall be painted with the same topcoat as the freeboard.